



LEARN SLOW, ACHIEVE LOW - STUDENTS NEEDING ADDITIONAL CURRICULAR SUPPORT AND PSYCHOLOGICAL SUPPORT (SNACS, SNAPS)

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ABSTRACT

Students with poor academic performance are of a great concern in all stakeholders perspectives. The reason for slow learning and low achieving is multifactorial and identifying the cause for each individual plays a major role to empower them. The teachers are valued by the number of students benefitted from them especially by those who struggle to sustain in the educational system. The high achievers learn on their own and the role of teacher is just to facilitate them. Whereas, the role of teacher with low achievers is to guide them with academic support by providing learning strategies, to counsel them when they are in need and to motivate them to get the desirable outcome.

KEY WORDS: Slow learners, low achievers, poor performers, motivation, learning strategies.

Introduction:

Be it a world famous educational institution or an unpopular institution, be it a kindergarten or a super specialty, regardless of the geographical region, race, culture, cadre etc. there is always a better cohort and a poor cohort in terms of students learning in a class. The poor performing cohort is always the concern for the teaching faculty. It is pejorative to name them as slow learners or low achievers or under achievers. The students who need support in the learning strategies are addressed here as Students Needing Additional Curricular Support (SNACS) and the other group for whom the need is more in psychiatric counselling, are termed as Students Needing Additional Psychological Support (SNAPS). Studies state that labelling of the students can harm them more rather doing good. (1) However, addressing the students as SNACS should not have any ethical issue. It is like addressing the physically challenged as differently abled. The differentiation term is only to pay special attention and upkeep them in their endeavour. It is a supporting mechanism where the fact alone is analysed and fault is not found. This paper reviews the various perspectives related to SNACS and SNAPS.

Etiological perspectives:

Decreased performance in the academics is a multifactorial problem that includes problem in understanding the language, interest in the profession, un conducive environment, lack of feeling of belongingness in the batch, fear of failure, inability to understand the subject effectively, lack of learning skills, health issues, personal and family issues. (2,3) Before thinking of management strategy three questions (1) need to be raised that includes, what is the problem? Whose problem is it? Is it a problem that must be resolved? Perception of the problem by the learners and identification of the learner's strength and weakness in knowledge, skills and attitude should precede intervention. Apart from the cognitive problems the learners might have life stresses, psychiatric illness, substance abuse or interpersonal conflict that can be an added factor.

The perception of stress, though a highly subjective issue, cannot be overlooked when it remains same for more number of individuals. The academic stress of the dental students in preclinical years is found to be the strong source of stress in a systematic review by Elani et al. (4) Several other studies (5-9) conducted in dental students using Modified Dental environmental Stress Questionnaire also have concluded that the source of academic stress being examination and grading, fear of failing, amount of assigned work are key factors and it becomes a vicious cycle that further compromises their academic performance. Students who could not cope up with the stress become slow learners or low achievers. It also results in attrition of students from the Institutions. (10,11) The psychological stress of the students demands repeated counselling to overcome it and to improve their performance. (12)

The students entering professional college are expected to be an effective learner on their own. But unfortunately it is not so. Chris Rachal et al. (13) have listed the various problems faced by the students in higher education. The major setbacks includes poor information processing, lack of motivation, writing skills, reading skills and test taking skills. The anxiety of the test make further differences in the academic classification of the students. John R. Kirby (14) even discusses on the reading and writing disability that attributes to literacy difficulties in university students who must have put enormous effort to overcome their problems and reach higher education. Hence, diagnosing such problem plays a major role in the line of intervention planning.

Motivational Perspectives:

Maslow's Hierarchy of needs theory

Abraham Maslow proposed a theory that had five levels of hierarchical needs which is directly related to the employee's performance. (15) The same theory can be related to the performance of the students as well. As per the theory unless a person gets fulfilled in his psychological needs, safety needs and feels the sense of belonging then only he perceives the confidence within him. The self-esteem leads to self-actualization that gives internal motivation for the students to perform well in the academics.

Students from other parts of the country or Non Residential Indians (NRI) will always have problem in settling comfortably in the educational institutions. Care should be taken to assure them of all the basic needs and make them comfortable before expecting them to perform adequately in their academics. (15) Mentoring is must in an educational institution to pay adequate individual attention. It aligns directly with the performance of the students. Irrespective of the criticisms towards the theory, it is accepted that it has contributed significantly towards the motivation of the employees and their ultimate performance. (16)

McGregor Theory X Y

Douglas McGregor in 1960s proposed the theories of human motivation and management which lead to the Theory X and Theory Y in "The Human Side of Enterprise". (17,18) The conventional conception of management in harnessing the human resource was put forth as Theory X. The additional beliefs as explained by McGregor behind the theory included the average people as indolent by nature who lacks ambition, prefers to be led and dislikes responsibility. It was also assumed that people are resistant to change and self-centred. This explains the pessimistic approach. Theory Y assumptions believed in an optimistic approach where the people are not considered to be resistant by nature motivation, believed to have the potential for development, responsible and to have the readiness to goal directed behaviour. According to him, Theory X rely upon external control of human behaviour, but Theory Y rely on self-control and self-direction. Applying this theory in the context of SNACS, the thought process of the faculty should be directed towards theory Y so that they can support the students positively by motivating them.

McClelland achievement motivation theory:

This theory of motivation is closely related to learning concepts. The need for achievement involves desire to independently master subjects and relies on increase in individual self-esteem through the exercise of talent. The set of factors as explained by McClelland that reflect a high need for achievement. According to that, the achievers likes to be responsible, take calculated risks by setting only moderate achievement goals and they need concrete feedback of how well they perform. (19) The low achievers need to be motivated to attempt small goals which they can accomplish reasonably well so that the achievement itself act as a strong source of motivation. The teachers should not challenge the students who are already in need of support. Challenging can do more harm than good.

Reducing the achievement gap – Mastery learning model:

Benjamin Bloom recommended the use of assessments as a part of the instructional process. It helps to diagnose learning difficulties of the individual students and provide them feedback and also to do remedial action. By providing repeated

training and feedback the achievement gap between the high and low achievers will be minimized. The low achievers will also have a chance of acquiring the competency by following the mastery learning model.(20) Kulik et al have concluded in their meta-analysis of 108 controlled evaluations that mastery learning model has positive effects on academic performance of the college students.(21)

Curricular perspectives:

Self-regulatory strategies:

The students should be trained in self-regulatory strategies. "Self-regulation refers to how individuals intentionally monitor, manage and modify approaches to learning and includes management of motivation, perceived stress and negative emotions about learning, use of learning strategies and skills and systematic and mindful planning to reach learning goals".(22)

The study skills of the students have a strong association with their academic performance.(23) The students who are in need have to be exposed to the skills promptly by the teachers. A wide arena of curricular support techniques are available and the success of it have been studied already. Dunlosky et al(24) discussed on the utility of ten learning techniques namely elaborative interrogation, self-explanation, summarization, highlighting, keyword mnemonic, imagery for text, rereading, practice testing, interleaved practice and distributed practice. The authors have discussed in detail on the learning conditions, student characteristics, materials and criterion tasks of each technique. The top five self-regulatory strategies ranked by academically successful students as discussed by Lilia Ruban et al(25) includes creating flashcards, condensing notes, reviewing notes, use of mnemonics and visual cues and memorizing material routinely.

Learning style:

The learning styles of individuals differ. Identification of the learning styles of the student is a broad area on its own and if done meticulously can play a major role. There are five types of learning style identifying instruments that includes the Kolb Learning Style Indicator, the Gregorc Style Delineator, the Felder-Silverman Index of Learning Styles, the VARK Questionnaire, and the Dunn and Dunn Productivity Environmental Preference Survey. The first learning style model was given by Kolb in 1984. The model explains four-process learning cycle. It starts with Concrete Experience (CE), moving to Reflective Observation (RO), then to Abstract Conceptualization (AC), and finally to Active Experimentation (AE). When learning activities embrace all four modes, effective learning takes place.(26) The VARK inventory was developed by Neil D. Fleming in 1987. VARK is an acronym for Visual, Auditory, Read/Write and Kinaesthetic learners. The students might have preference towards a single modality or multiple modalities.(27) The need for the modification of the teaching methods to cater the needs of multimodal learners was proven to be useful in many of the studies.(28-30) Auditory learners can use podcasts, kinaesthetic learners can use audience response systems, projects and mobile applications and you tube video learning packages can be used by visual learners. Matching the learning strategies to the learning styles apart from merging the teaching methods alone can be more successful.(31)

Memory:

Students often complain that they were not able to remember what they have studied and stated memory as one common cause for low academic performance. Herman Ebbinghaus has explained about the forgetting curve where the memory fades off with time without recall or relearning. According to him recall at definite periodic intervals increases the memory and shifts the knowledge from short term to long term memory.(32) Spaced relearning has been studied to improve the memory.(33-35) Lee T. Robertson(36) studied on the memory and brain and suggested on how to consolidate from short term memory to long term memory. Gaining learners complete attention, involving multiple sensory systems in the acquisition of new information, review of the material by the students shortly after the class helps in retaining information in long term memory. Students can be made aware of such practices to improve their memory.

Summary:

"A correct diagnosis is three fourths the remedy" – Mahatma Gandhi. Diagnosing the cause behind the students who learn slow and achieve low is the most important step in differentiating them as Students Needing Additional Curricular Support (SNACS) and Students Needing Additional Psychological Support (SNAPS). Only then the supportive measures can be rendered accordingly to improve their academic and personal wellbeing. Acknowledging the stress and offering support to the students, prevents them from turning into problem learners. The system factors also needs to be considered and modified accordingly.

REFERENCES:

1. Yvonne Steinert. The "problem" junior: whose problem is it? *BMJ* 2008;336:150-3.
2. Kannan L, Vijayaragavan P. V, Pankaj. B. Shah, Suganathan, Praveena. Factors contributing decreased performance of slow learners. *IJSTR* 2015;4(3):58-61.
3. Erica Tatiane da Silva, Maria de Fátima Nunes, Maria Goretti Queiroz, Cláudio R. Leles. Factors influencing students' performance in a Brazilian Dental School. *Braz Dent J* 2010;21(1):80-86.
4. Elani HW, Allison P, Kumar RA, Mancini L, Lambrou A, Bedos C. A systematic review of stress in dental students. *J Dent Educ*. 2014;78(2):226-42.
5. Muneer G. Babar, Syed S, hasan, Yong J. Oot, Syed I. Ahmed, Pei S. Wong. Perceived sources of stress among Malaysian Dental students. *Int J Med Educ* 2015;6:56-61.

6. Peker I, Alkurt MT, Usta MG, Turkbay T. The evaluation of perceived sources of stress and stress levels among Turkish dental students. *Int Dent J*. 2009;59(2):103-11.
7. Abu-Ghazaleh SB, Rajab LD, Sonbol HN. Psychological stress among dental students at the University of Jordan. *J Dent Educ*. 2011;75(8):1107-14.
8. Sofola OO, Jeboda SO. Perceived sources of stress in Nigerian dental students. *Eur J Dent Educ*. 2006;10(1):20-3.
9. Shashidar Acharya, Factors affecting stress among Indian dental students. *J Dent Educ* 2003;67(10):1140-8.
10. Bridget M Maher, Helen Hynes, Catherine Sweeney, Ali S Khashan, Margaret O'Rourke, Kieran Doran, Anne Harris and Siun O'Flynn. Medical School Attrition-Beyond the Statistics. A Ten Year Retrospective Study. *BMC Medical Education* 2013;13:13
11. Anne Mette Morcke, Lotte O'Neill, Inge Trads Kjeldsen & Berit Eika. Selected determinants may account for dropout risks among medical students. *Dan Med J* 2012;59:1-6.
12. Renuka Devi M.R., P.R. Devaki, Madhanika Madhavan, P. SaiKumar. The Effect of Counselling on the Academic Performance of College Students. *J Clin Diagn Res* June 2013;7(6):1086-1088.
13. K. Chris Rachal, Sherri Daigle, and Windy S. Rachal. Learning Problems Reported by College Students: Are They Using Learning Strategies? *Journal of Instructional Psychology* 2007;34(4):191-99.
14. John R. Kirby. Higher Education Students with Reading and Writing Difficulties (Editorial). *Exceptionality Education Canada* 2007;17(2):129-134.
15. Nyameh Jerome. Application of the Maslow's hierarchy of need theory; impacts and implications on organizational culture, human resource and employee's performance. *International Journal of Business and Management Invention* 2013;2(3):39-45.
16. Avneet Kaur. Maslow's Need Hierarchy Theory: Applications and Criticisms. *Global Journal of Management and Business Studies* 2013;3(10):1061-64.
17. McGregor D. M. The Human Side of Enterprise. <http://www.kean.edu/~lelovitz/docs/EDD6005/humansideofenterprise.pdf>
18. Matthew Stewart. Theories X and Y revisited. *Oxford Leadership Journal*. Shifting the trajectory of civilization 2010;1(3):1-5.
19. Pardee, Ronald L. Motivation theories of Maslow, Herzberg, McGregor and McClelland. A literature review of selected theories dealing with job satisfaction and motivation. 1990. Educational Resources Information Center (ERIC).
20. Thomas R. Guskey. Formative Classroom Assessment and Benjamin S. Bloom: Theory, Research, and Implications. <http://files.eric.ed.gov/fulltext/ED490412.pdf>.
21. Chen-Lin C. Kulik, James A. Kulik and Robert L. Bangert-Drowns. Effectiveness of Mastery Learning Programs: A Meta-Analysis. *Review of Educational Research Summer 1990*;60(2):265-299.
22. Taylor W. Acee, Claire Ellen Weinstein, Michelle E. Jordan, Jeremy K. Dearman, Carlton J. Fong. Self-regulated learning: Helping students manage their own learning. Theories underlying postsecondary tutoring, mentoring and training. Chapter 1. Pg39-42.
23. Shetty SS, Srinivasan SR. Effectiveness of study skills on academic performance of dental students. *J Educ Ethics Dent* 2014;4:28-31.
24. John Dunlosky, Katherine A. Rawson, Elizabeth J. Marsh, Mitchell J. Nathan, and Daniel T. Willingham. Improving Students' Learning with effective learning techniques: Promising directions from Cognitive and Educational Psychology. *Psychological Science in the Public Interest* 2013;14(1):4-58.
25. Lilia Ruban, Sally M. Reis. Patterns of Self-Regulatory Strategy Use among Low-Achieving and High-Achieving University Students. *Roeper Review*, Spring 2006;28(3):148-156.
26. Thomas F. Hawk, Amit J. Shah. Using Learning Style Instruments to Enhance Student Learning. *Decision Sciences Journal of Innovative Education* 2007;5(1):1-19.
27. Vanessa Marcy. Adult Learning Styles: How the VARK Learning Style Inventory Can Be Used to Improve Student Learning. *Perspective on Physician Assistant Education*, Spring 2001;12(2):117-120.
28. Khalid A, Rahim K, Bashir Z, Hanif A. Learning style preferences among students of medical and dental colleges. *Adv Health Prof Educ*. 2015;1(1):13-17
29. Wichuda Jiraporncharoen, Chaisiri Angkurawaranon, Manoch Chockjamsai, Athavudh Deesomchok, Juntima Euathrongchit. Learning styles and academic achievement among undergraduate medical students in Thailand. *J Educ Eval Health Prof* 2015;12:38.
30. Harold Pashler, Mark McDaniel, Doug Rohrer, and Robert Bjork. Learning Styles Concepts and Evidence. *Psychological Science in the Public Interest* 2009;9(3):105-119.
31. Vipula Rasanga Bataduwarachchi, Muditha Madhuwanthi Dissanayake, Sharmila Thillainathan, Rohan Wass Jayasekara. Perception of the learning strategies and the learning styles among first year medical students: A cross sectional survey. *SEAJME* 2013;7(1):14-21.
32. Thomas O. Nelson. Ebbinghaus's Contribution to the Measurement of Retention: Savings during relearning. *Journal of experimental psychology* 1985;11(3):472-9.
33. William D. Hendricson. Assessing and Helping Challenging Students: Part One, Why Do Some Students Have Difficulty Learning? *J Dent Educ* 2002;66(1):43-61.
34. Katherine A. Rawson, John Dunlosky, Sharon M. Sciaritelli. The Power of Successive Relearning: Improving Performance on Course Exams and Long-Term Retention. *Educ Psychol Rev* 2013;25:523-548.
35. Shana K. Carpenter, Nicholas J. Cepeda, Doug Rohrer, Sean H. K. Kang, Harold Pashler. Using Spacing to Enhance Diverse Forms of Learning: Review of Recent Research and Implications for Instruction. *Educ Psychol Rev* 2012;24:369-378.
36. Lee T. Robertson. Memory and the Brain. *J Dent Educ* 2002;66(1):30-42.